

**Card Construction Inc.  
Sagadahoc County  
Bowdoin, Maine  
A-873-71-B-A**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1**

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

1. Card Construction Inc. (CC) of Bowdoin, Maine was issued Air Emission License A-873-71-A-N on November 12, 2003, permitting the operation of emission sources associated with their crushed stone and gravel facility.
2. CC has requested an amendment to their license in order to add an additional portable crusher and associated generator.

**B. New Emission Equipment**

**Rock Crushers:**

<u>Designation</u>	<u>Powered</u>	<u>Process Rate</u> <u>(tons/hour)</u>	<u>Control Device</u>	<u>Date of</u> <u>Manufacture</u>
RC#2	electrical	150	Spray Nozzles	2004

**Diesel Units:**

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Power Output</u>	<u>Fuel Type, % sulfur</u>
Generator #2	1.14 MMBtu/hr	8.32 gal/hr	162 Hp	diesel fuel, 0.05%

**C. Application Classification**

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as defined in the Department’s regulations. This modification will not result in any permitted increase in any regulated pollutant. Therefore, this modification is determined to be a minor modification and has been processed as such.

**II. BEST PRACTICAL TREATMENT**

**A. Introduction**

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

**B. Rock Crusher**

RC#2 is a portable unit that was manufactured in 2004 with a rated capacity of 150 ton/hr. RC#2 is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from RC#2 is particulate emissions. To meet BACT for control of particulate matter (PM) emissions from the rock crusher, CC shall maintain water sprays on the rock crusher and operate as needed to control visible emissions. Visible emissions from the rock crusher shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

C. Generator #2

Generator #2 will be used to provide electrical power to RC#2. A summary of the BACT analysis for Generator #2 (162 Hp) is the following:

1. The total fuel use for Generator #1 and Generator #2 combined shall not exceed 8,000 gal/year of diesel fuel, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.05% by weight.
2. Chapter 106 regulates fuel sulfur content, however in this case a BACT analysis for SO<sub>2</sub> determined a more stringent limit of 0.05% was appropriate and shall be used.
3. The PM and PM<sub>10</sub> limits are derived from Chapter 103.
4. NO<sub>x</sub>, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from Generator #2 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Facility Emissions

CC shall be restricted to the following annual emissions, based on a 12 month rolling total:

**Total Licensed Annual Emissions for the Facility**  
(used to calculate the annual license fee)

	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Generators	0.1	0.1	0.1	2.4	0.5	0.2
<b>Total TPY</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>2.4</b>	<b>0.5</b>	<b>0.2</b>

**ORDER**

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-873-71-B-A subject to the conditions found in Air Emission A-873-71-A-N and in the following conditions:

**The following shall replace Condition (16) of Air Emission License A-873-71-A-N:**

**(16) Rock Crushers**

- A. CC shall maintain spray nozzles for particulate control on RC#1 and RC#2 and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [MEDEP Chapters 115 (BPT) and 101]
- B. CC shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT]
- C. CC shall maintain a log detailing and quantifying the hours of operation on a daily basis for RC#1 and RC#2. The operation log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT]
- D. The crushers shall not be attached or clamped via cable, chain, turnbuckle, bolt, or other means (except electrical connections) to any anchor, slab, or structure (including bedrock) that must be removed prior to transportation. [MEDEP Chapter 115, BPT]

**The following replaces Condition (17) of Air Emission License A-873-71-A-N:**

**(17) Generators**

- A. Total fuel use for Generator #1 and Generator #2 combined shall not exceed 8,000 gal/yr of diesel fuel with a maximum sulfur content not to exceed 0.05% by weight. Compliance shall be based on fuel records from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Records of annual fuel use shall be kept on a 12-month rolling total basis. [MEDEP Chapter 115, BPT]
- B. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.34	0.34	0.14	12.39	2.67	0.98
Generator #2	0.14	0.14	0.06	5.03	1.08	0.40

- C. Visible emissions from Generator #1 and Generator #2 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]

**The following shall replace Condition (19) of Air Emission License A-873-71-A-N:**

**(19) Equipment Relocation [MEDEP Chapter 115, BPT]**

- A. CC shall notify the Bureau of Air Quality, by a written notification at least 48 hours prior to relocation of any equipment carried on this license. The notification shall be sent to the address below or to a Department Regional Office:

Attn: Relocation Notice  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment. Written notice may be sent by mail, facsimile (fax), or e-mail.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.

**The following shall replace Condition (22) of Air Emission License A-873-71-A-N:**

**(22) Payment of Fees**

CC shall pay the annual air emission license fee within 30 days of November 30<sup>th</sup> of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS                      DAY OF                      2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAWN R. GALLAGHER, COMMISSIONER

**The term of this amendment shall be concurrent with the term of Air Emission License A-873-71-A-N.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/4/04

Date of application acceptance: 8/18/04

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Lynn Ross, Bureau of Air Quality.